

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 22 OCT 2001

WIPO

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Applicant's or agent's file reference AA422F/JH		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US99/20328	International filing date (day/month/year) 03/09/1999	Priority date (day/month/year) 03/09/1999
International Patent Classification (IPC) or national classification and IPC A61K7/50		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

- This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 6 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

- This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 15/12/2000	Date of completion of this report 18.10.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Ruckebusch, V Telephone No. +49 89 2399 8493 

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/20328

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-47 as originally filed

Claims, No.:

1-11 as originally filed

Drawings, sheets:

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US99/20328

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	5
	No:	Claims	1-4, 6-11
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-11
Industrial applicability (IA)	Yes:	Claims	1-11
	No:	Claims	

2. Citations and explanations
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/20328

i. Reference is made to the following documents:

D1: WO 95 03781 A (PROCTER & GAMBLE) 9 February 1995

D2: WENNINGER, J.A.: 'International Cosmetic Ingredient Dictionary and Handbook' 1997, THE COSMETIC, TOILETRY AND FRAGRANCE ASSOCIATION, WASHINGTON (US); XP002146325

Re Item V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

v. Novelty and Inventive Step (Article 33(2) and (3) PCT)

v.i The document D1 discloses (cf. examples I, II, IV to XV) oil-in-water emulsion compositions comprising:

- 0.05 to 20% of an active ingredient;
- 0.1 to 25% of an alkoxylated ether;
- 0.05 to 10% of an emulsifier, distearyl dimethyl ammonium chloride, as cationic emulsifier;
- 0 to 10% of a deposition aiding agent, polypropylene glycol like PPG-30 (page 26 line 24 to page 27 line 14);
- 0 to 10 % of a polymeric thickener, alkyl modified hydroxyalkylcellulose polymers (cf. page 27 lines 25 to 28);
- 25 to 99.7% of water (most preferably from 70 to 90%) and optional compound like stearyl and cetyl alcohols as fatty alcohol (page 35 line 20 to page 36 line 6).

The subject-matter of claims 2 and 3 is defined as a result to be achieved and therefore do not provide any new technical feature (see Item VIII).

The document D1 is thus novelty destroying for the subject-matter of the claims 1 to 4 and 6 to 11 of the present application in the sense of Article 33(2) PCT.

- v.ii The subject-matter of the present application (in view of the present data) is about compositions comprising a polypropylene glycol (only a "single- polypropylene glycol-chain segment polymer" of example 1 and 2) and a gel matrix containing a cationic surfactant and a solid fatty compound (i.e. a fatty alcohol).

The compositions appear to be efficient enough for the applicant in view of the technical problem previously posed.

As mentioned in the description of the present application (page 4 lines 21 to 24), it is known that "propylene glycols deposit onto or are absorbed into hair to act as humectant/moisturizer", which has already been disclosed in the document D1 (page 26 lines 24 to 25) under the term "deposition adding polymers" and in document D2 as "skin conditioning agent".

Actually, the polypropylene glycol being settled on the hair provides a special heaviness of the hair, which therefore reduces the "flyaway hair area". This was foreseeable by the skilled person in the art.

- v.iii The most relevant state of the art is document D1, which is, like the present application, concerned with personal care compositions for depositing on and conditioning the skin (Document D1) or the hair (the present application).

Dependent claim 5 does not contain any feature which, in combination with the features of any claim to which it refers, meet the requirements of the PCT in respect of inventive step (Article 33(3) PCT), because multi-propylene glycol-chain segment polymers would also be used for their known properties (see document D2 page 1145); furthermore, none of the examples of the present application showing a reduction of "flyaway hair area" contains such a polymer.

- v.iv The subject-matter of the claims 1 to 11 can therefore not be considered as involving an inventive step in the sense of Article 33(3) PCT.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US99/20328

R l t m VIII

Certain observations on the international application

- viii. Claims 2 and 3 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The claims attempt to define the subject-matter in terms of the result to be achieved which merely amounts to a statement of the underlying problem. The technical features necessary for achieving this result should be added.

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 6 A61K7/48 A61K7/00 A61K7/50 A61K4 J

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 6 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	WO,A,94 02176 (THE PROCTER & GAMBLE COMPANY) 3 February 1994 see the whole document	1,10,21
A	US,A,4 499 069 (T. J. KRAFTON) 12 February 1985 see the whole document	1-21
A	WO,A,93 07903 (RICHARDSON-VICKS INC) 29 April 1993 see the whole document	1-21

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

9 December 1994

Date of mailing of the international search report

27. 12. 94

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patendaan 2
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 Tel. (+ 31-70) 340-2040, Tx. 31 651 epo nl,
 Fax (+ 31-70) 340-3016

Authorized officer

Sierra Gonzalez, M

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/US 94/08618

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO-A-9402176	03-02-94	AU-B- 4673993	14-02-94
US-A-4499069	12-02-85	CA-A- 1208136	22-07-86
WO-A-9307903	29-04-93	AU-A- 2863992	21-05-93
		CA-A- 2117265	29-04-93
		CZ-A- 9400901	13-07-94
		EP-A- 0608322	03-08-94
		FI-A- 941770	15-04-94
		PT-A- 100964	30-11-93

PATENT COOPERATION TREATY

EO/US
PCT/US99/20328

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing:

15 March 2001 (15.03.01)

International application No.:

PCT/US99/20328

Applicant's or agent's file reference:

AA422F/JH

International filing date:

03 September 1999 (03.09.99)

Priority date:

Applicant:

YANG, Jian-Zhong et al

1. The designated Office is hereby notified of its election made:



in the demand filed with the International preliminary Examining Authority on:

15 December 2000 (15.12.00)



in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was



was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer:

J. Zahra

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference AA422F/JH	FOR FURTHER ACTION <small>see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.</small>	
International application No. PCT/US 99/ 20328	International filing date (day/month/year) 03/09/1999	(Earliest) Priority Date (day/month/year)
Applicant THE PROCTER & GAMBLE COMPANY et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :
- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

- ☒ the text is approved as submitted by the applicant.
- ☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

- ☐ as suggested by the applicant.
- ☐ because the applicant failed to suggest a figure.
- ☐ because this figure better characterizes the invention.
- ☐ None of the figures.

INTERNATIONAL SEARCH REPORT

National Application No

PCT/US 99/20328

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 A61K7/50 A61K7/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95 03781 A (PROCTER & GAMBLE) 9 February 1995 (1995-02-09) page 20, line 34 -page 21, line 3 page 26, line 24 -page 27, line 14 page 34, line 30 -page 35, line 35 page 36, line 1-6 examples I,,II,,IV,,V,,VI-IX,,XI-XV	1-4,6-11
A	WENNINGER, J.A.: "Internation Cosmetic Ingredient Dictionary and Handbook" 1997, THE COSMETIC, TOILETRY AND FRAGRANCE ASSOCIATION, WASHINGTON (US) XP002146325 page 1118 -page 1119 page 1145	1-11

☐ Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

31 August 2000

Date of mailing of the international search report

15/09/2000

Name and mailing address of the ISA

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Authorized officer

Sierra Gonzalez, M

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 99/20328

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9503781 A	09-02-1995	AT 179883 T	15-05-1999
		CA 2168543 A	09-02-1995
		CN 1130864 A	11-09-1996
		DE 69418465 T	09-12-1999
		EP 0714283 A	05-06-1996
		ES 2131208 T	16-07-1999
		GR 3030575 T	29-10-1999
		JP 9501161 T	04-02-1997
		US 5989536 A	23-11-1999
